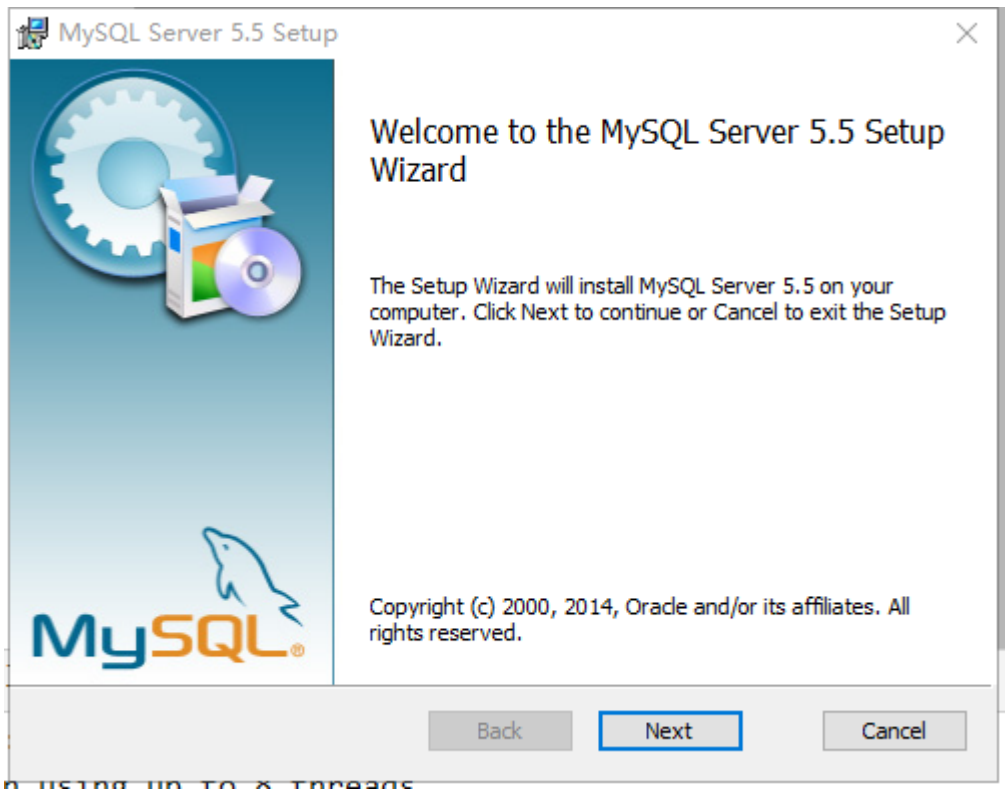
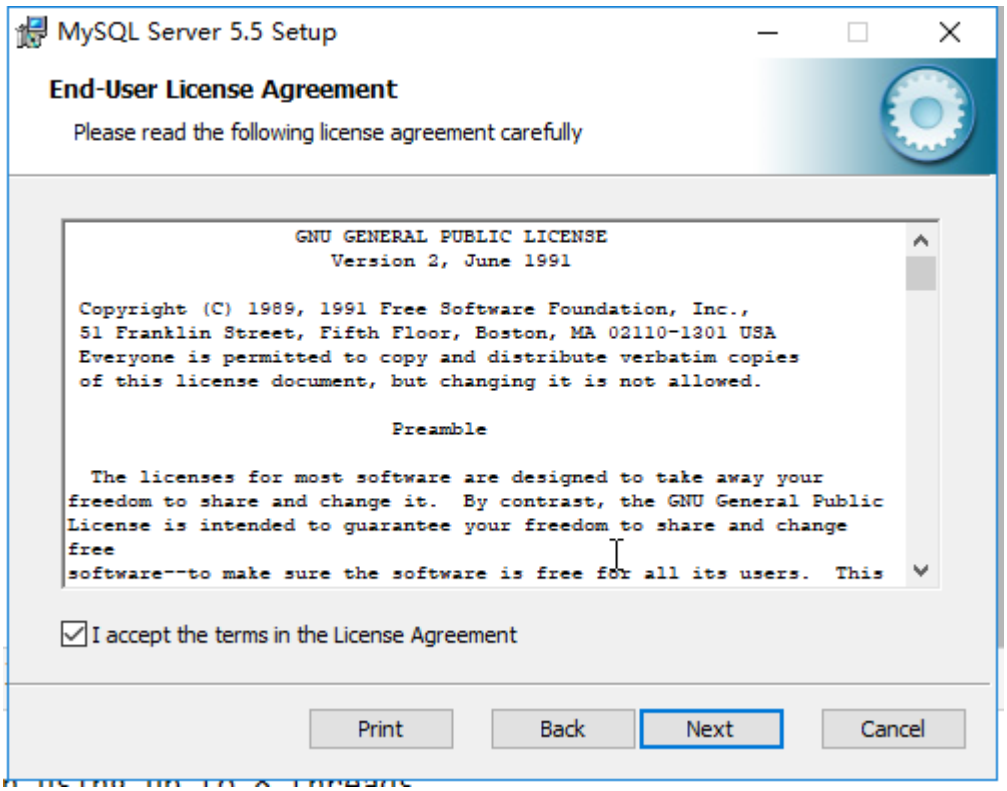
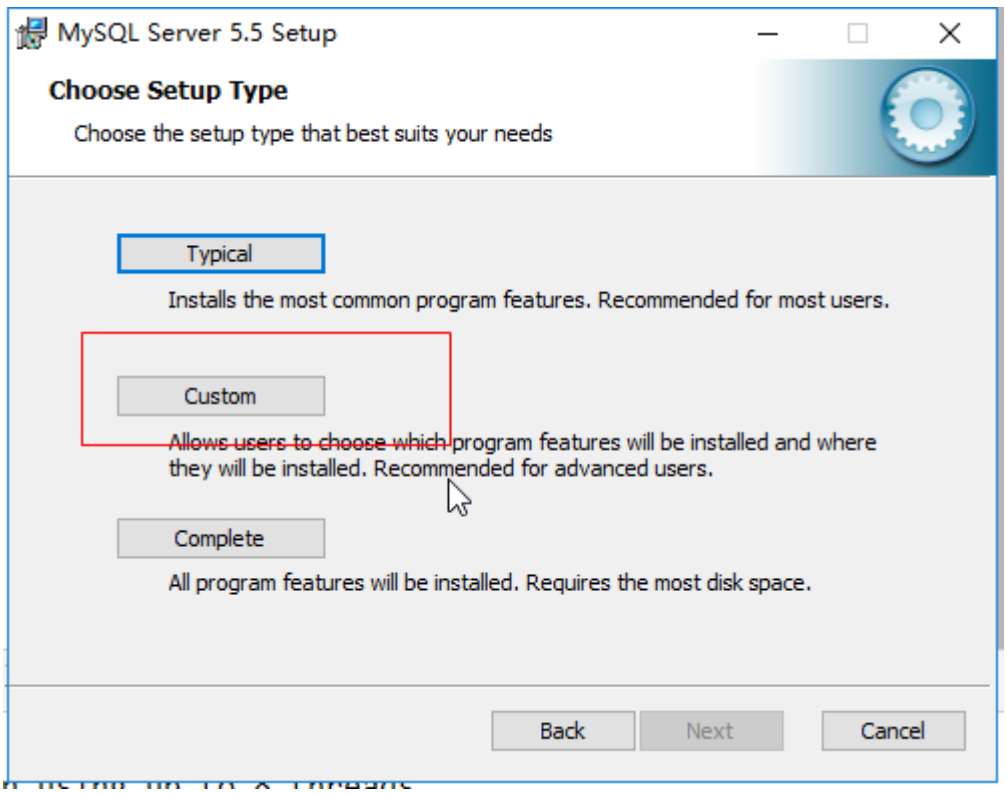
day026 Mysql数据库的安装

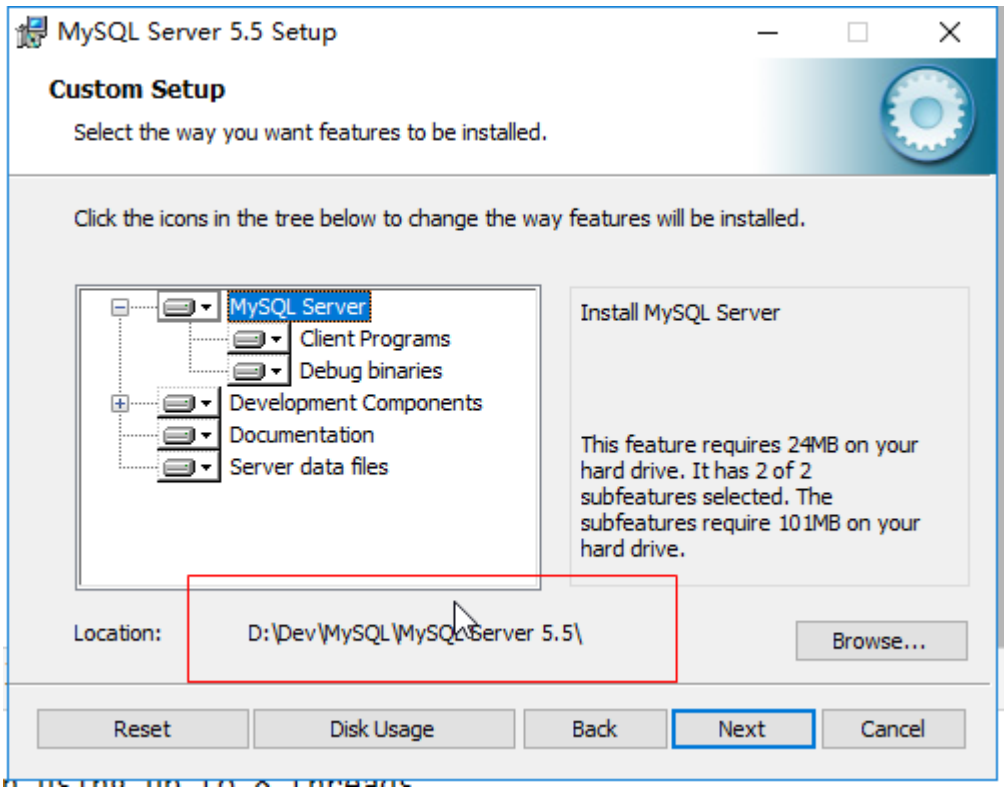
> 作者: 张大鹏

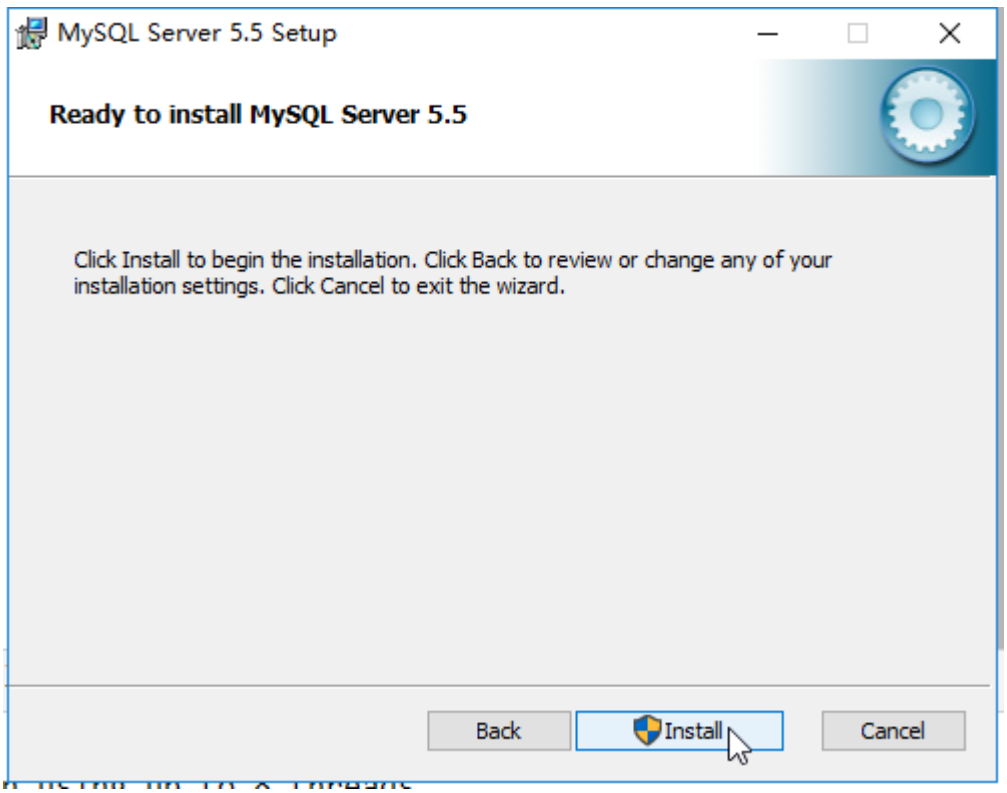
001.安装Mysql




MySQL Server 5.5 Setup
End-User License Agreement
Please read the following license agreement carefully
GNU GENERAL PUBLIC LICENSE
Version 2, June 1991
Copyright (C) 1989, 1991 Free Software Foundation, Inc.,
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA
Everyone is permitted to copy and distribute verbatim copies
of this license document, but changing it is not allowed.
Preamble
The licenses for most software are designed to take away your
freedom to share and change it. By contrast, the GNU General Public
License is intended to guarantee your freedom to share and change
free
software--to make sure the software is free for all its users. This
I accept the terms in the License Agreement
Print
Back
Next
Cancel

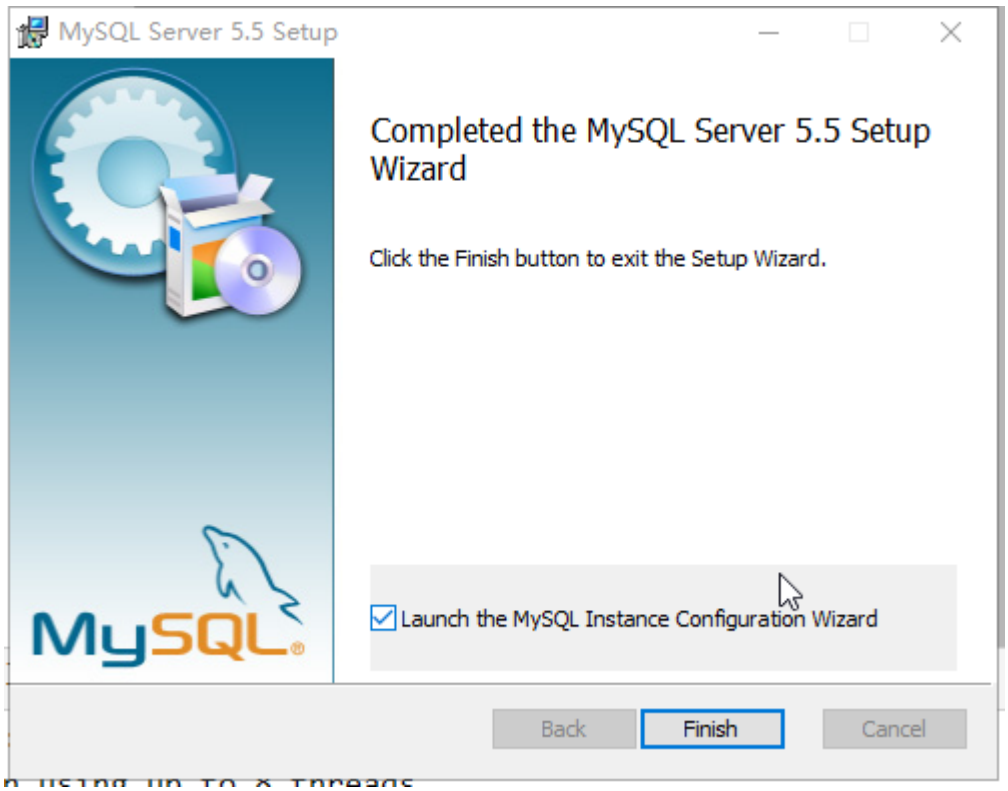

MySQL Server 5.5 Setup
Choose Setup Type
Choose the setup type that best suits your needs
Typical
Installs the most common program features. Recommended for most users.
Custom
Allows users to choose which program features will be installed and where
they will be installed. Recommended for advanced users.
Complete
All program features will be installed. Requires the most disk space.
Back
Next
Cancel

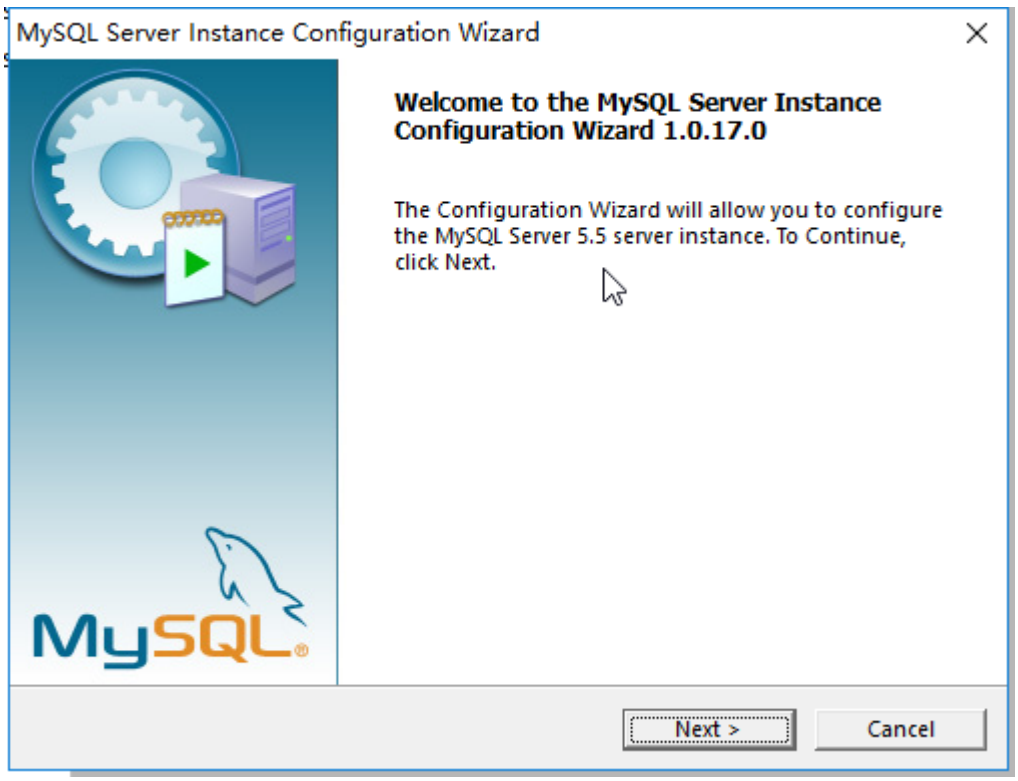

MySQL Server 5.5 Setup
Custom Setup
Select the way you want features to be installed.
Click the icons in the tree below to change the way features will be installed.
MySQL Server
Client Programs
Debug binaries
Development Components
Documentation
Server data files
Install MySQL Server
This feature requires 24MB on your hard drive. It has 2 of 2 subfeatures selected. The subfeatures require 101MB on your hard drive.
Location:
D:\Dev\MySQL\MySQL Server 5.5\
Browse...
Reset
Disk Usage
Back
Next
Cancel

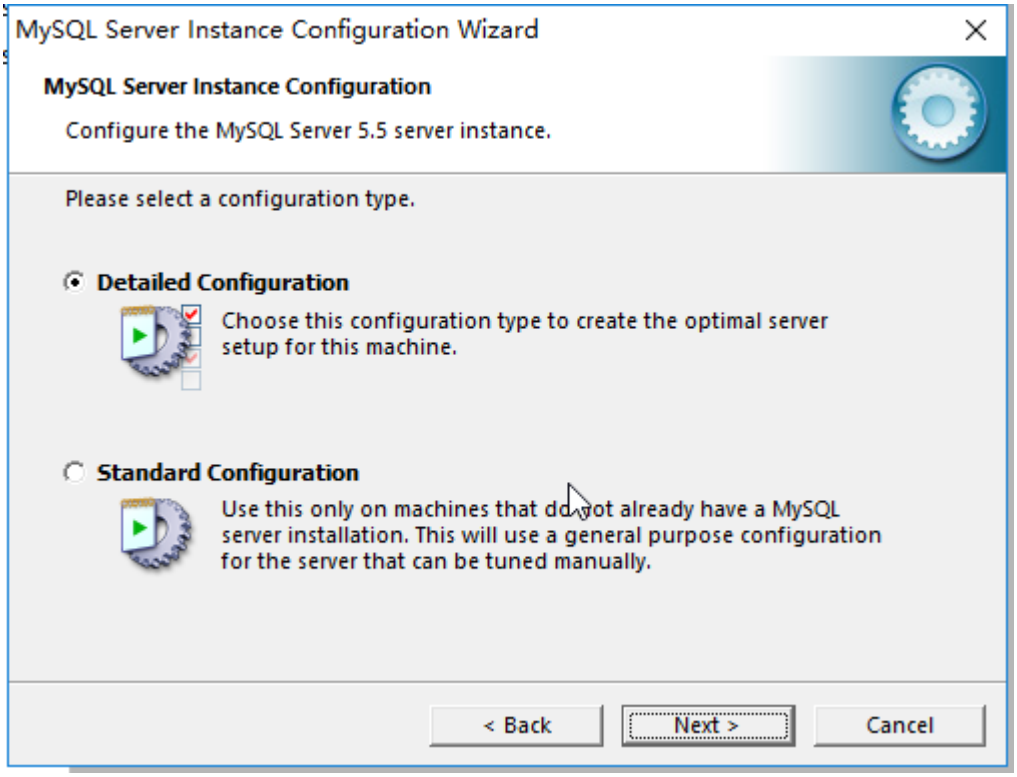

MySQL Server 5.5 Setup
Ready to install MySQL Server 5.5
Click Install to begin the installation. Click Back to review or change any of your installation settings. Click Cancel to exit the wizard.
Back
Install
Cancel

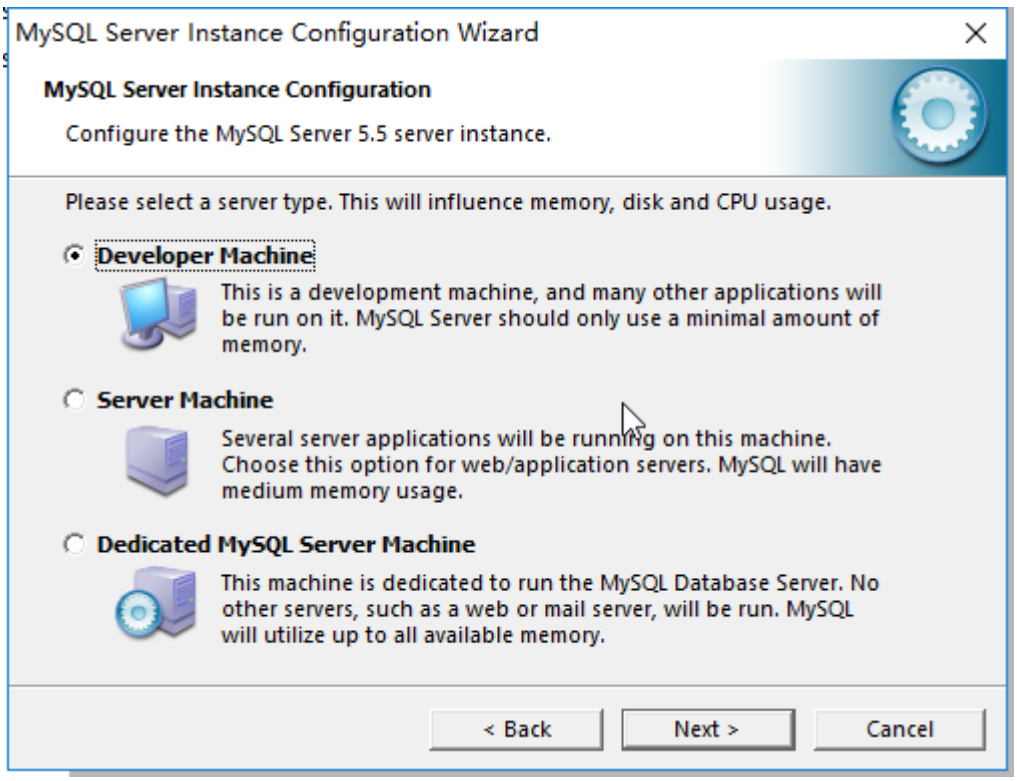

MySQL Enterprise
MySQL
Enterprise
A MySQL Enterprise subscription is the most comprehensive offering of MySQL database software, services, and support to ensure your business achieves the highest levels of reliability, security, and uptime.
An Enterprise Subscription includes:
1. The MySQL Enterprise Server - The most reliable, secure, and up-to-date version of the world's most popular open source database.
2. MySQL Enterprise Monitor Service - An automated virtual database assistant.
3. MySQL Production Support - Technical and consultative support when you need it, along with service packs, hot-fixes, and more.
For more information click [More...] or visit www.mysql.com/enterprise
More ...
< Back
Next >
Cancel

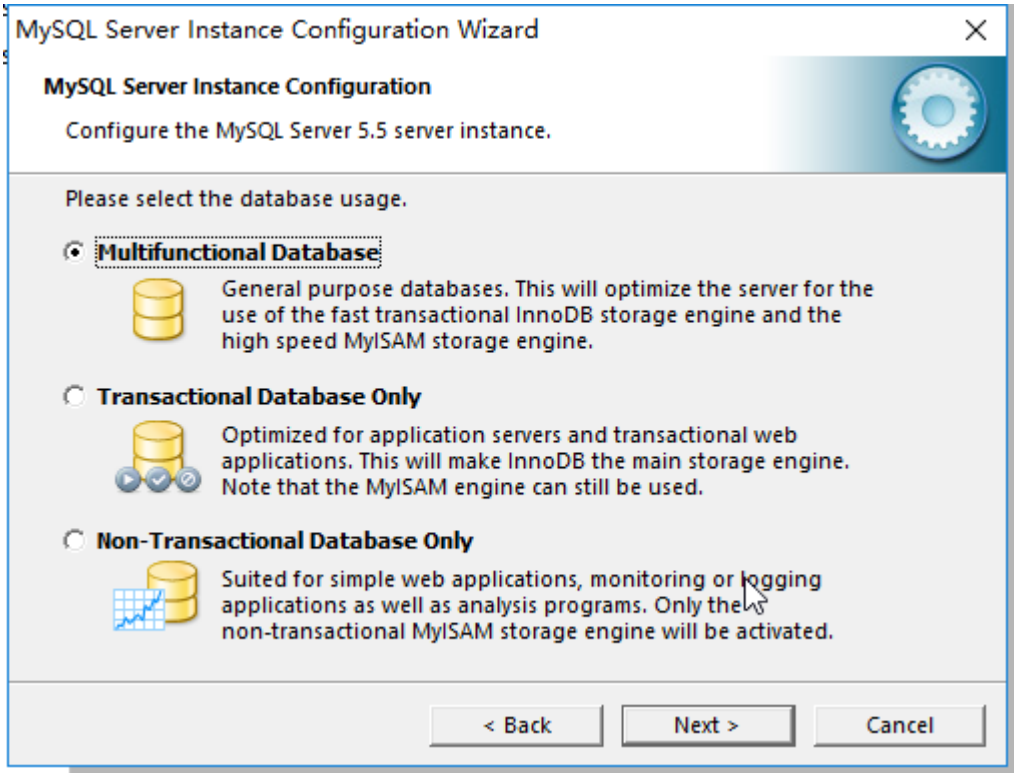

MySQL Enterprise
MySQL
Enterprise
The MySQL Enterprise Monitor Service
• Quickly identifies your most expensive SQL code across all your servers.
• MySQL Advisors and 125+ Best Practice Rules ensure security and performance.
• Alerts and Expert Advice on how to fix problems and tune for peak performance.
For more information click [More...] or visit www.mysql.com/enterprise
More ...
< Back
Next >
Cancel

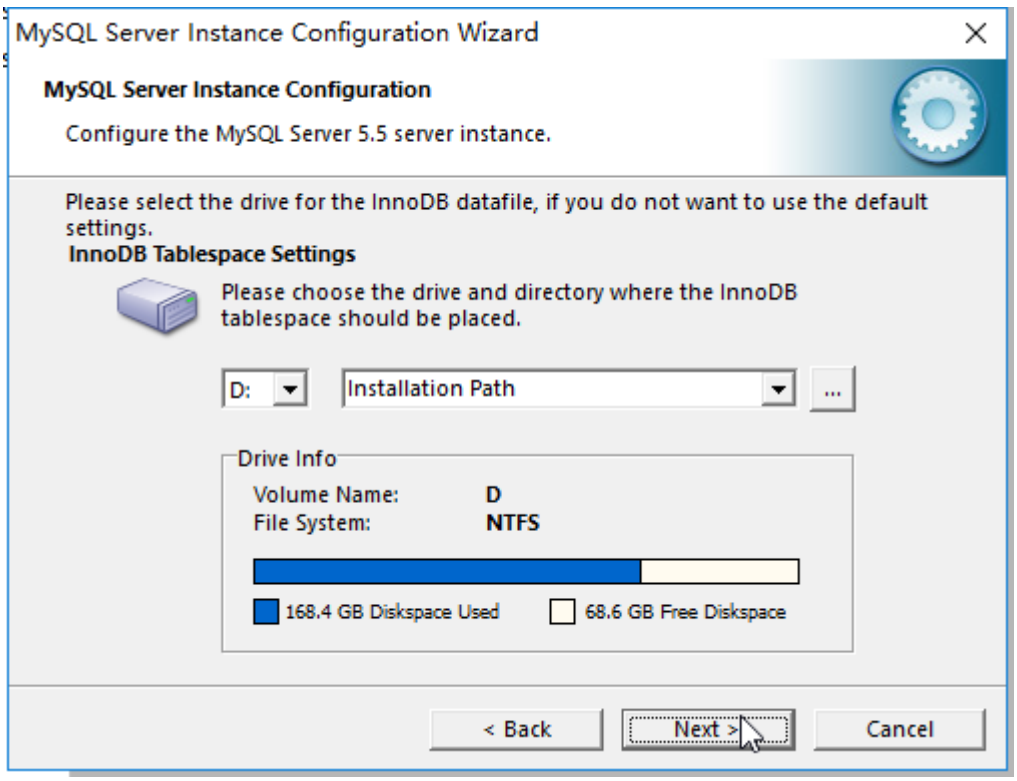

MySQL Server 5.5 Setup
Completed the MySQL Server 5.5 Setup Wizard
Click the Finish button to exit the Setup Wizard.
Launch the MySQL Instance Configuration Wizard
Back
Finish
Cancel

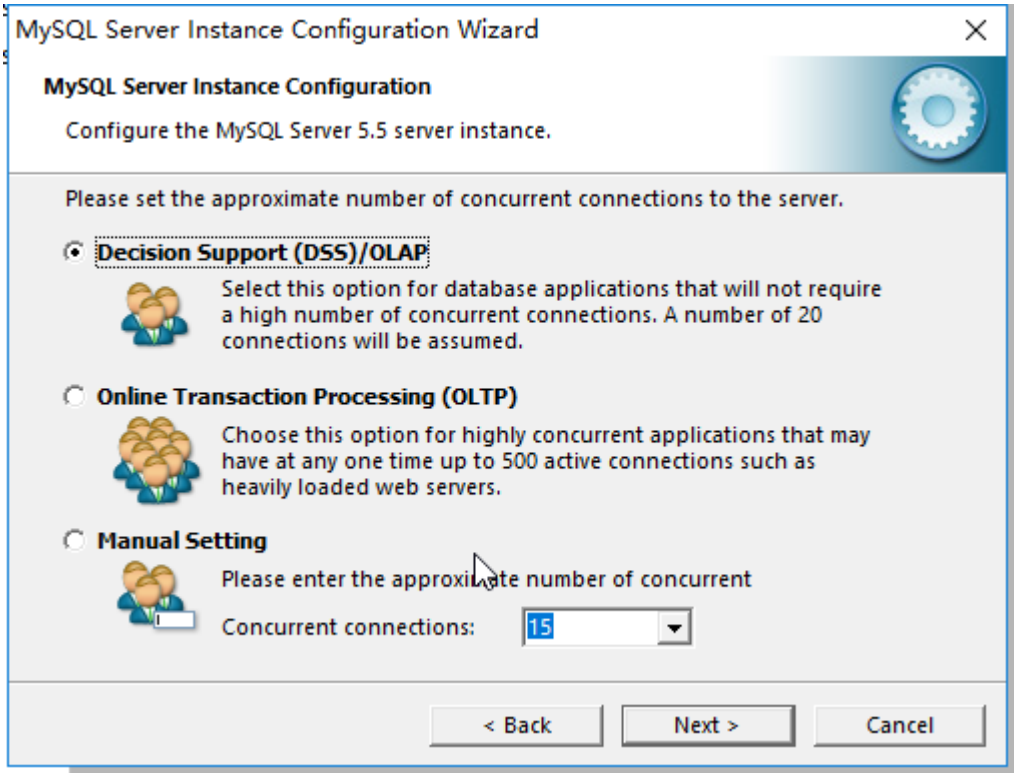

MySQL Server Instance Configuration Wizard
Welcome to the MySQL Server Instance Configuration Wizard 1.0.17.0
The Configuration Wizard will allow you to configure the MySQL Server 5.5 server instance. To Continue, click Next.
Next >
Cancel

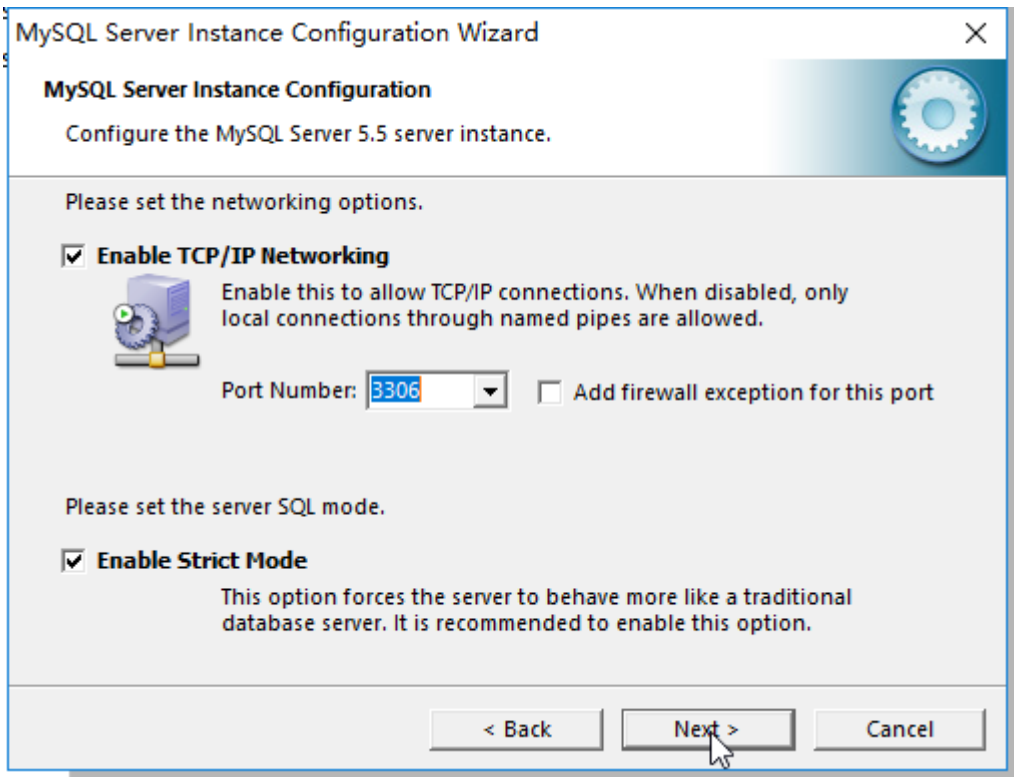

MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration
Configure the MySQL Server 5.5 server instance.
Please select a configuration type.
Detailed Configuration
Choose this configuration type to create the optimal server setup for this machine.
Standard Configuration
Use this only on machines that do not already have a MySQL server installation. This will use a general purpose configuration for the server that can be tuned manually.
< Back
Next >
Cancel

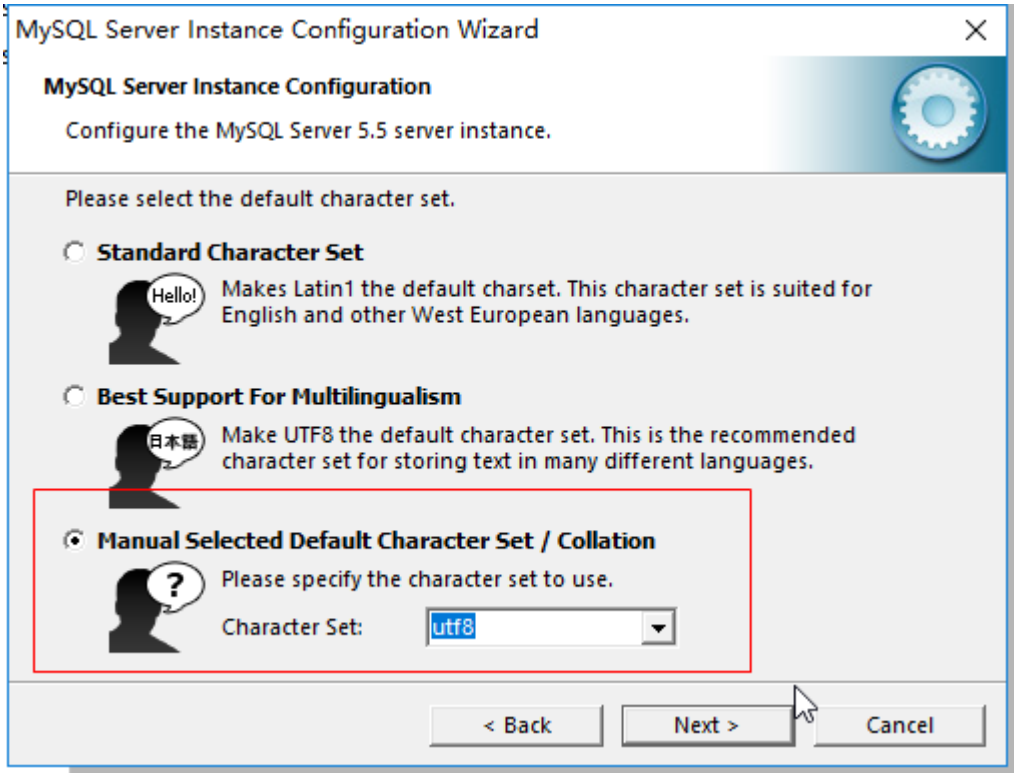

MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration
Configure the MySQL Server 5.5 server instance.
Please select a server type. This will influence memory, disk and CPU usage.
Developer Machine
This is a development machine, and many other applications will be run on it. MySQL Server should only use a minimal amount of memory.
Server Machine
Several server applications will be running on this machine. Choose this option for web/application servers. MySQL will have medium memory usage.
Dedicated MySQL Server Machine
This machine is dedicated to run the MySQL Database Server. No other servers, such as a web or mail server, will be run. MySQL will utilize up to all available memory.
< Back
Next >
Cancel

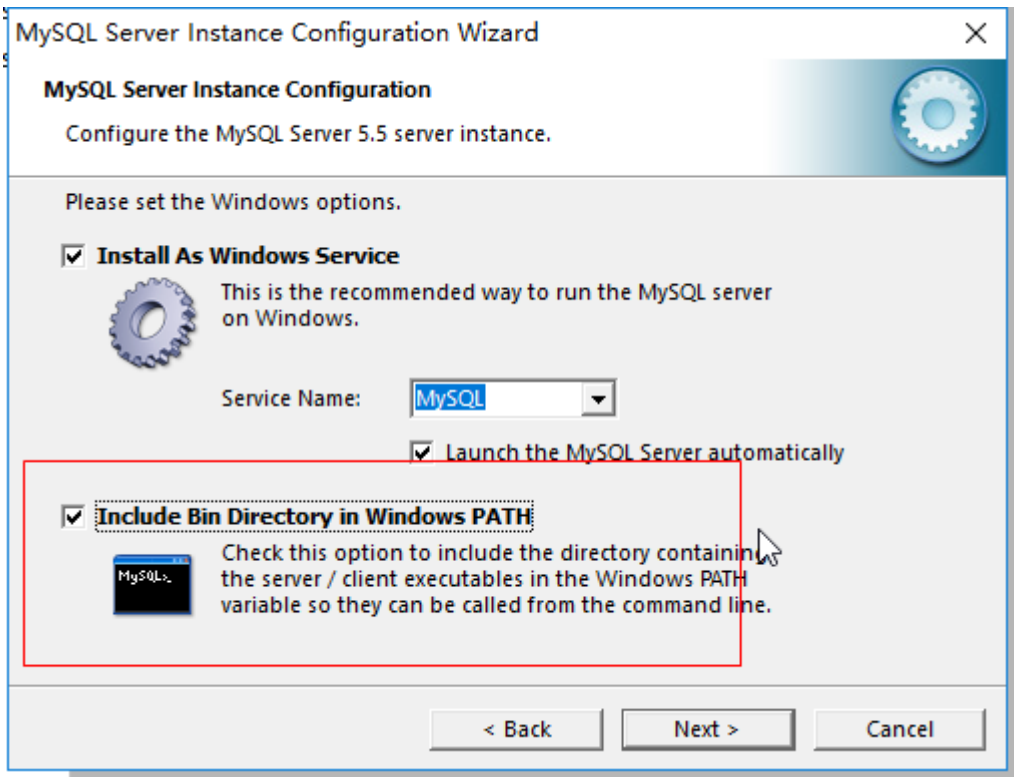

MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration
Configure the MySQL Server 5.5 server instance.
Please select the database usage.
Multifunctional Database
General purpose databases. This will optimize the server for the use of the fast transactional InnoDB storage engine and the high speed MyISAM storage engine.
Transactional Database Only
Optimized for application servers and transactional web applications. This will make InnoDB the main storage engine. Note that the MyISAM engine can still be used.
Non-Transactional Database Only
Suited for simple web applications, monitoring or logging applications as well as analysis programs. Only the non-transactional MyISAM storage engine will be activated.
< Back
Next >
Cancel

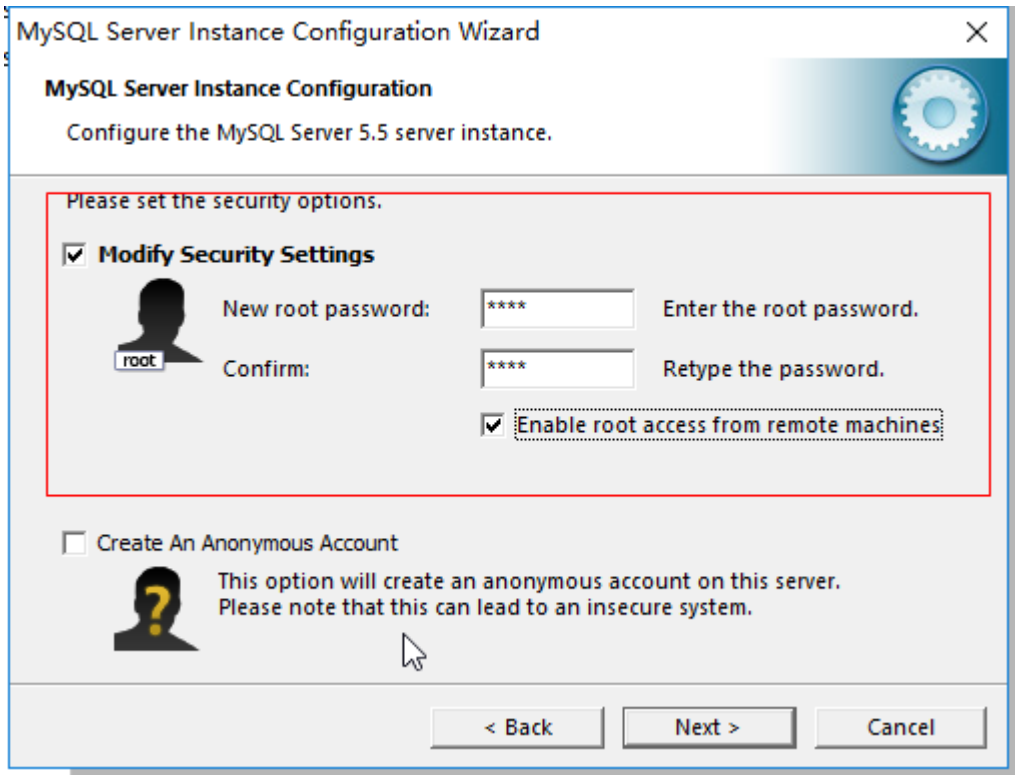

MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration
Configure the MySQL Server 5.5 server instance.
Please select the drive for the InnoDB datafile, if you do not want to use the default settings.
InnoDB Tablespace Settings
Please choose the drive and directory where the InnoDB tablespace should be placed.
D:
Installation Path
...
Drive Info
Volume Name: D
File System: NTFS
168.4 GB Diskspace Used
68.6 GB Free Diskspace
< Back
Next >
Cancel

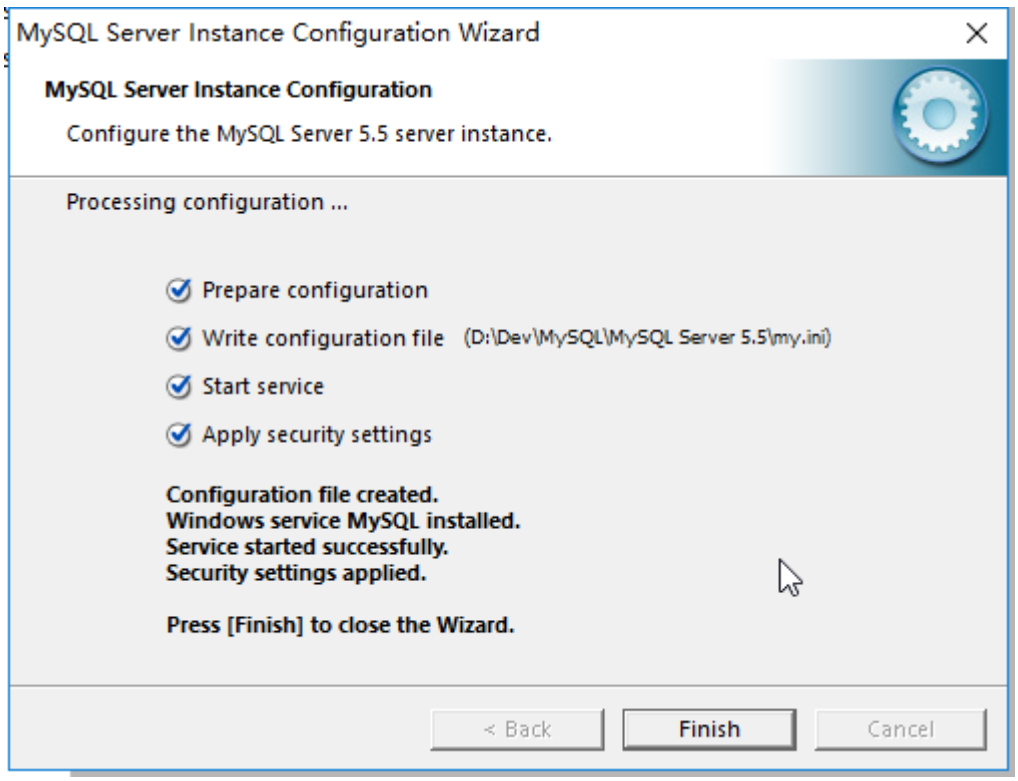

MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration
Configure the MySQL Server 5.5 server instance.
Please set the approximate number of concurrent connections to the server.
Decision Support (DSS)/OLAP
Select this option for database applications that will not require a high number of concurrent connections. A number of 20 connections will be assumed.
Online Transaction Processing (OLTP)
Choose this option for highly concurrent applications that may have at any one time up to 500 active connections such as heavily loaded web servers.
Manual Setting
Please enter the approximate number of concurrent
Concurrent connections:
15
< Back
Next >
Cancel


MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration
Configure the MySQL Server 5.5 server instance.
Please set the networking options.
Enable TCP/IP Networking
Enable this to allow TCP/IP connections. When disabled, only local connections through named pipes are allowed.
Port Number:
3306
Add firewall exception for this port
Please set the server SQL mode.
Enable Strict Mode
This option forces the server to behave more like a traditional database server. It is recommended to enable this option.
< Back
Next >
Cancel


MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration
Configure the MySQL Server 5.5 server instance.
Please select the default character set.
Standard Character Set
Hello!
Makes Latin1 the default charset. This character set is suited for English and other West European languages.
Best Support For Multilingualism
日本語
Make UTF8 the default character set. This is the recommended character set for storing text in many different languages.
Manual Selected Default Character Set / Collation
?
Please specify the character set to use.
Character Set:
utf8
< Back
Next >
Cancel

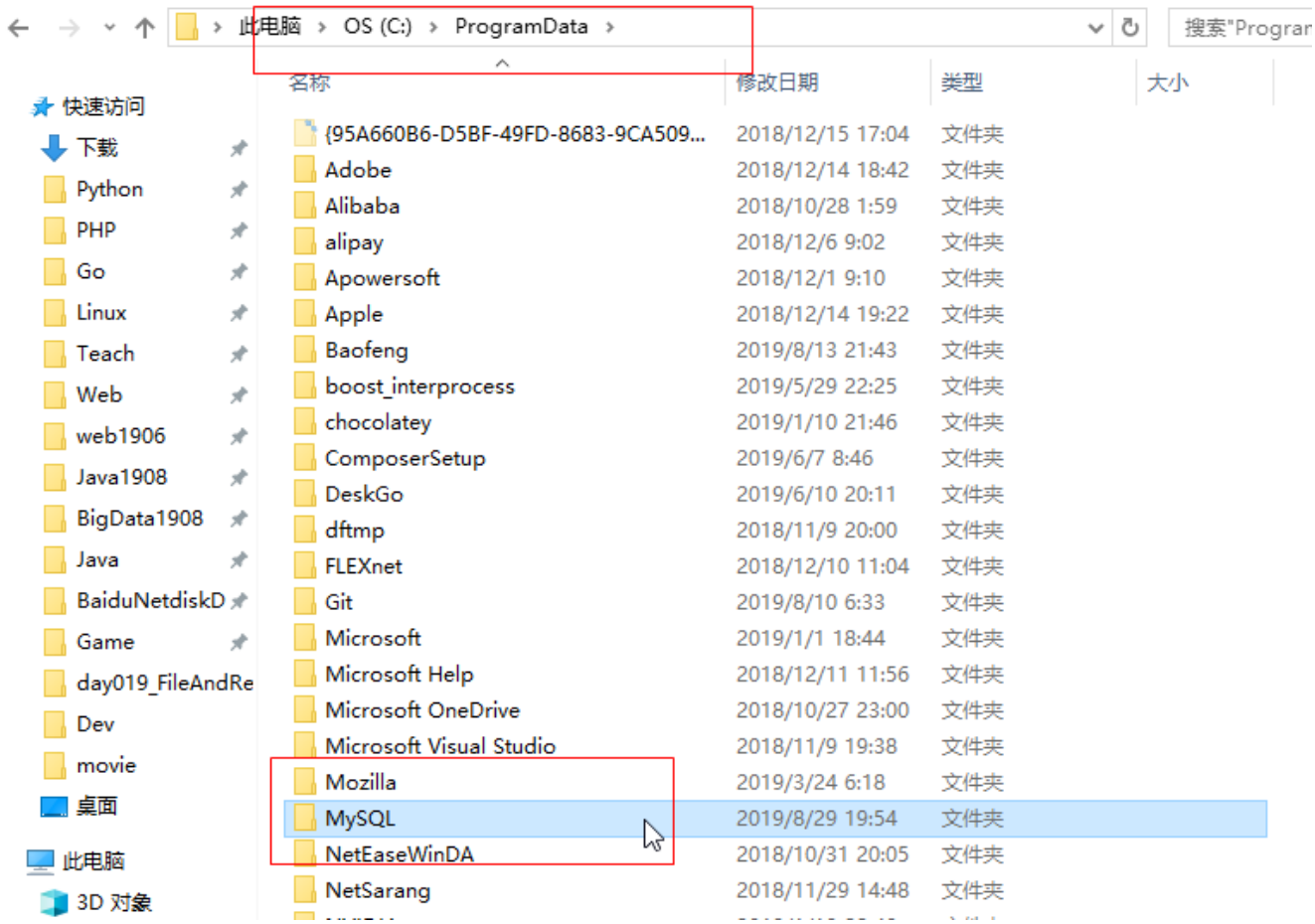

MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration
Configure the MySQL Server 5.5 server instance.
Please set the Windows options.
Install As Windows Service
This is the recommended way to run the MySQL server on Windows.
Service Name:
MySQL
Launch the MySQL Server automatically
Include Bin Directory in Windows PATH
Check this option to include the directory containing the server / client executables in the Windows PATH variable so they can be called from the command line.
< Back
Next >
Cancel





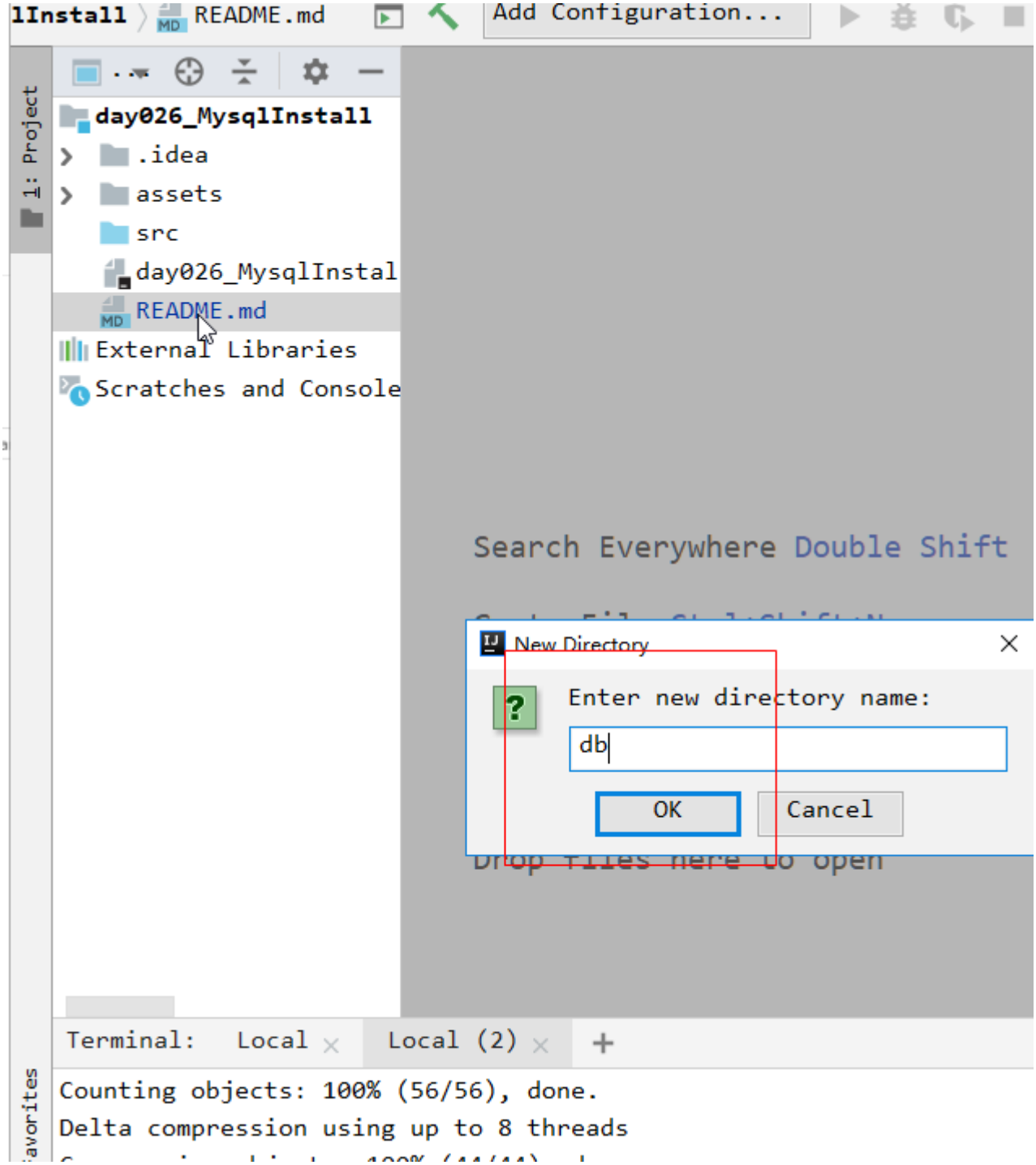
002.卸载

- 1.卸载`Mysql`软件
- 2.删除C盘下的`Mysql`目录

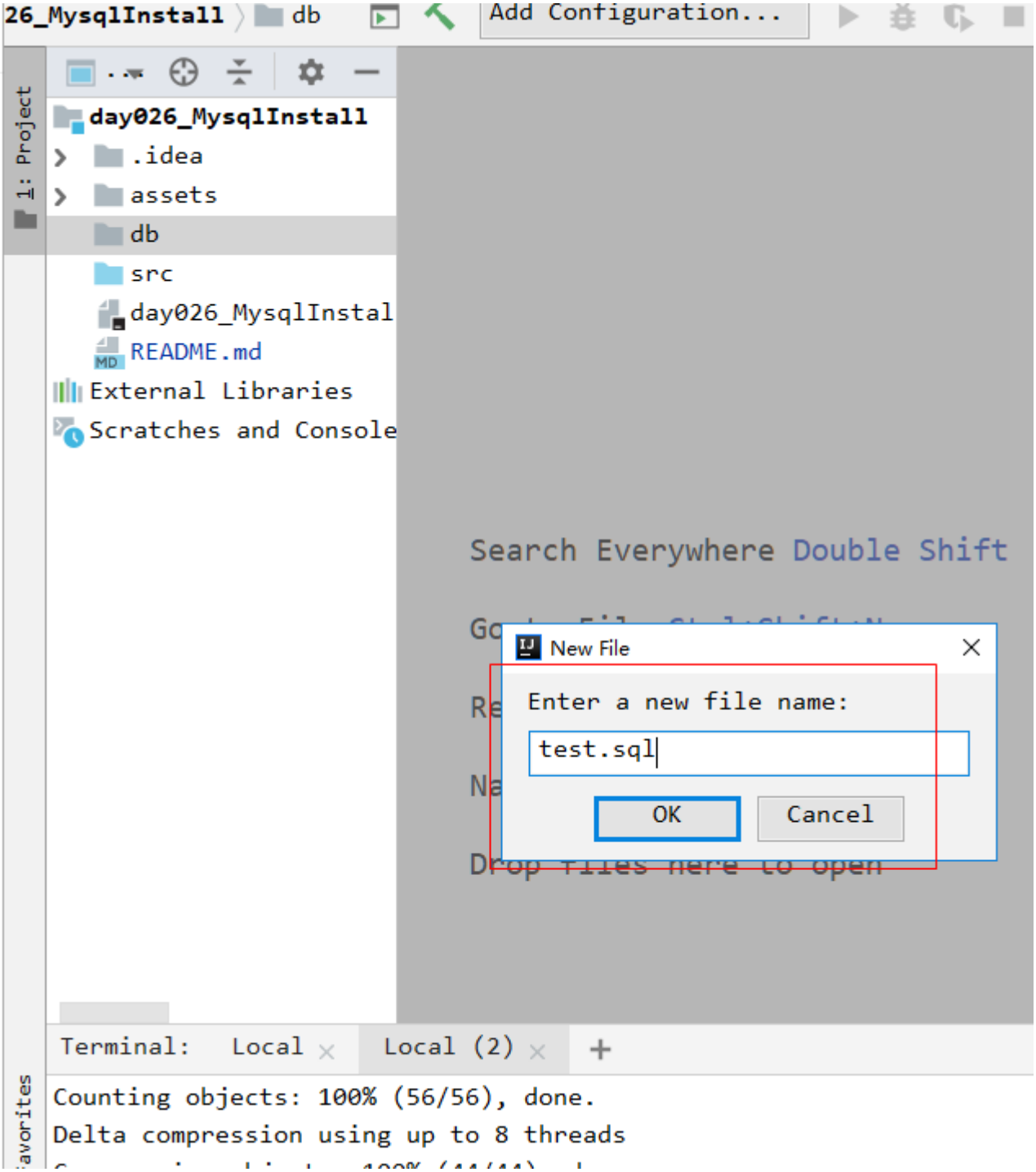


003.登录

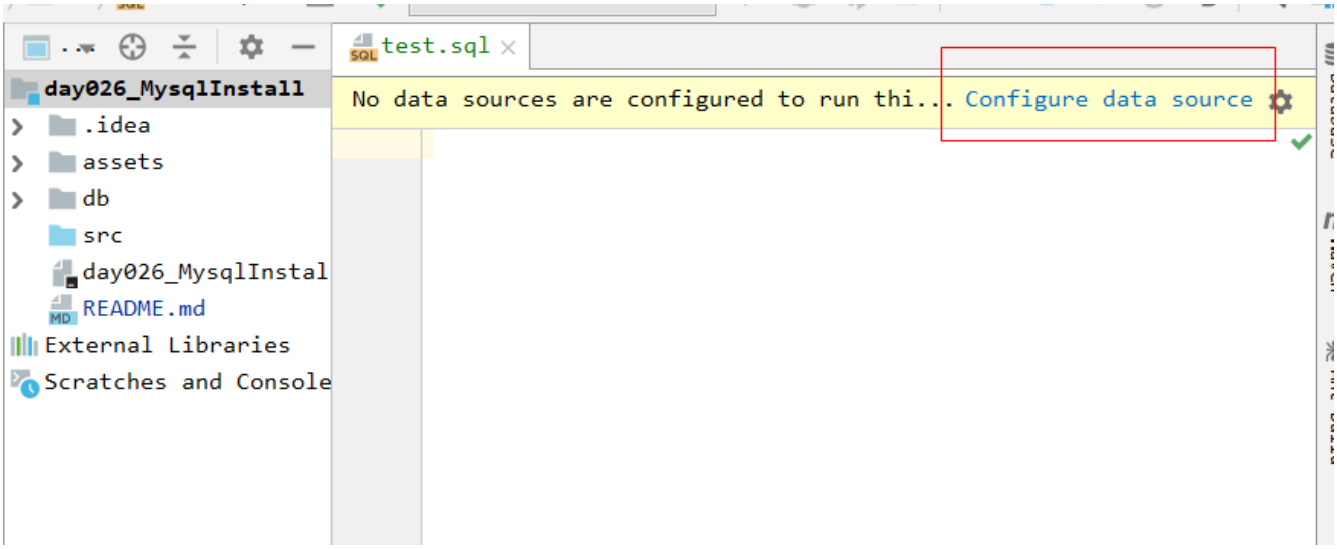
- 1.在项目根目录创建 `db` 文件夹



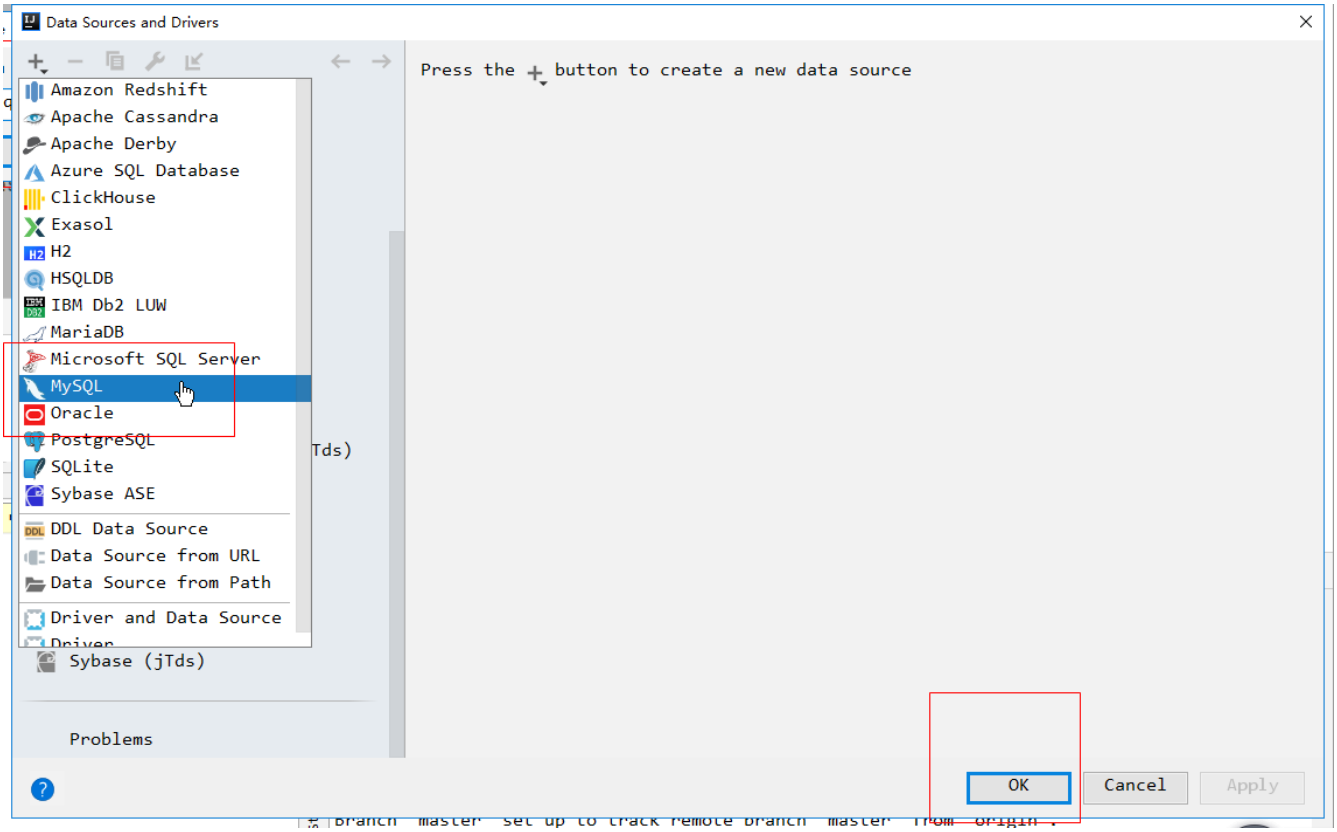
- 2.在 `db` 文件夹中创建 `test.sql` 文件



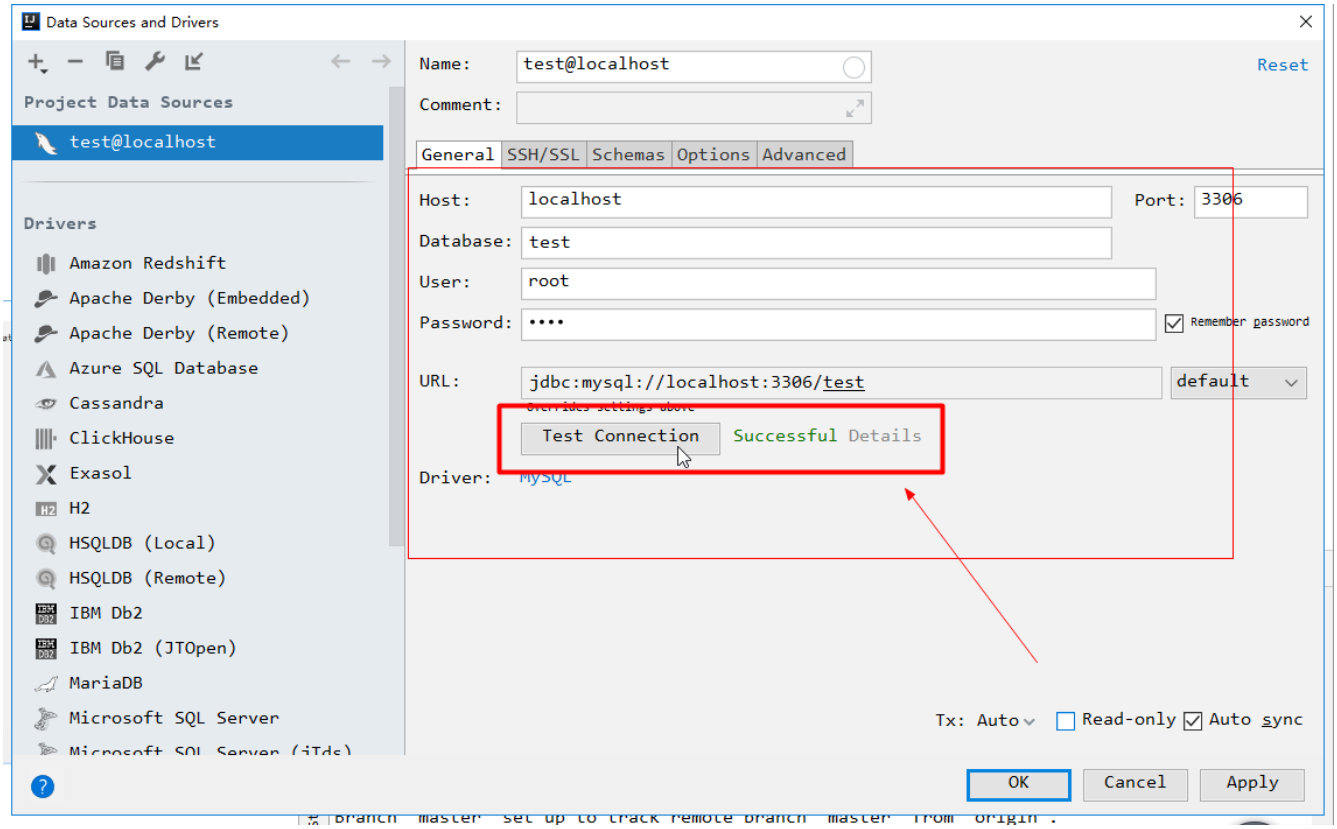
- 3.创建好后点右上角`Configure...`



- 4.弹出窗口中添加`Mysql`

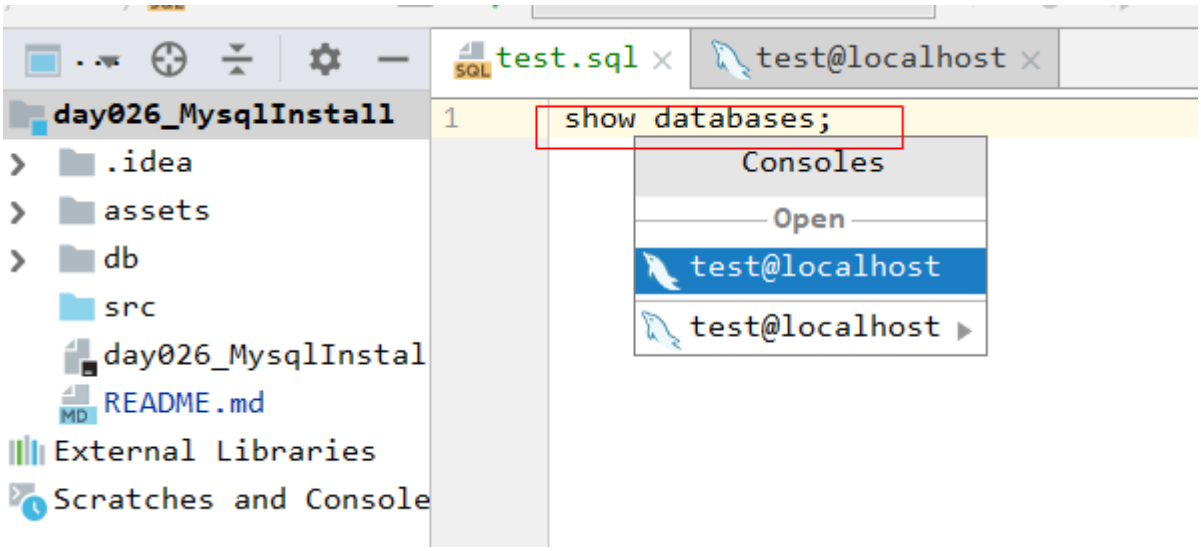


- 4.填写数据库`test`和账号密码,然后测试

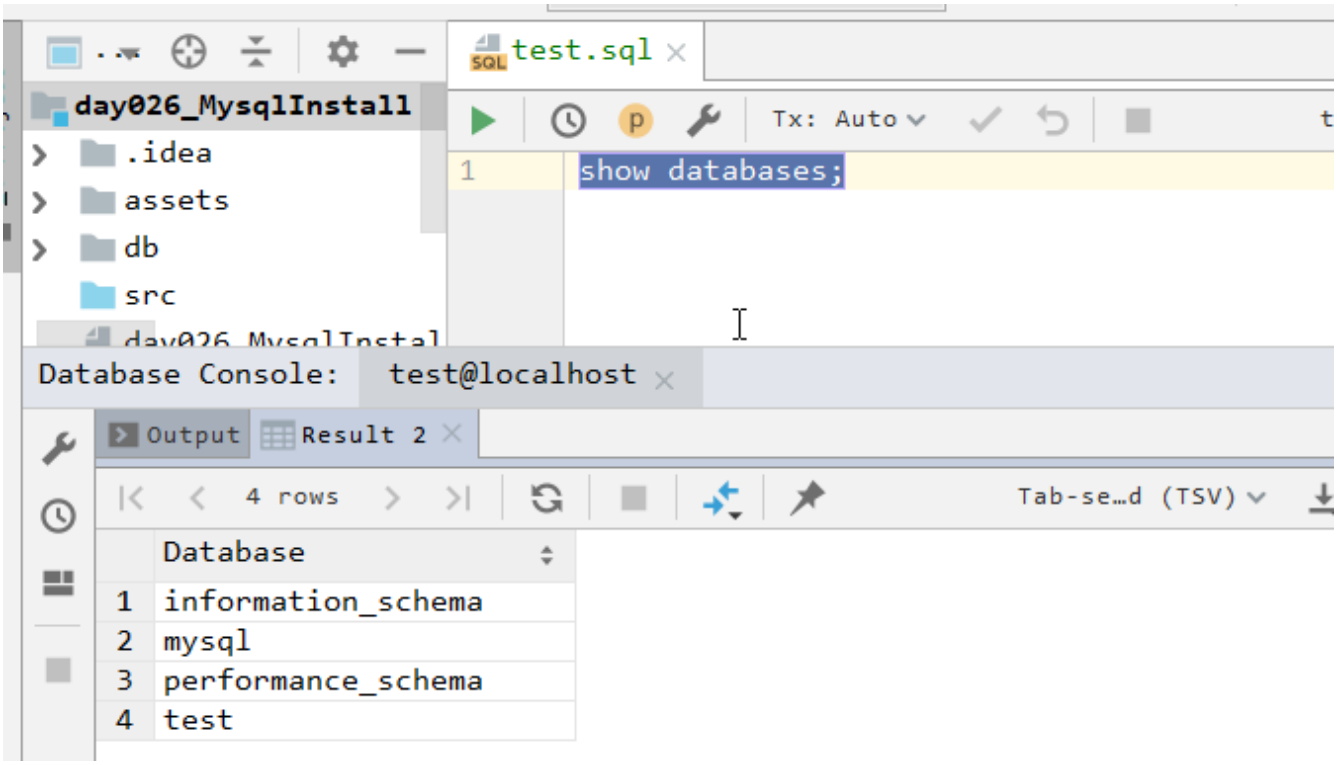


> 出现绿色的`Successful`则表示成功

- 5.在`test.sql`中写一句查询语句,然后按`ctrl+enter`运行



- 6.出现查询结果表示成功



004.关闭和启动服务

```
管理员身份运行cmd
开启服务:net start mysql
关闭服务:net stop mysql
```

005.命令方式登录和退出

```
cmd打开窗口
登录: mysql -uroot -p你的密码
退出: exit
```

006. SQL

- `Structured Query Language`结构化查询语言
- 定义了操作所有关系型数据库的规则

007.分类

- `DDL`:操作数据库和表

- `DML`增删改表中的数据
- `DQL`查询表中的数据
- `DCL`授权

008.查询数据库

```
查看数据库名称
show databases;
查看创建数据库的语句
show create database mysql;
```

009.创建数据库

```
创建数据库
create database if not exists db1 character set utf8;
```

010.修改数据库

```
修改数据库的字符串
alter database db1 character set utf8;
```

011.删除数据库

```
删除数据库
drop database db1;
```

012.使用数据库

```
查看正在使用的数据库
select database();

切换到对应的数据
use db1;
```

013.创建表

```
语法
create table 表名(
    列名1 数据类型1,
    列名2 数据类型2,
    ...
);
```

- 数据库常用数据类型
  - `int`:整数类型
  - `double`:小数类型
  - `date`:日期类型,只包含年月日
  - `datetime`:日期类型,包含年月日时分秒
  - `timestamp`:时间戳类型,包含年月日时分秒
    - 如果不赋值或者赋值为null,则默认使用当前系统时间
  - `varchar`:字符串
- 创建一张学生表

```sql
-- 创建数据库
create database if not exists db1 character set utf8;

-- 使用数据库
use db1;

-- 查看当前正使用的数据库
select database();

-- 创建学生表
create table students(
  id int primary key auto_increment,
  name varchar (32),
  age int,
  math double (4,1),
  english double (4,1),
  chinese double (4,1),
  birthday date,
  insert_time timestamp
);

-- 删除学生表
drop table students;
```

014.查询表

```
查询所有的表
show tables;

查询表结构
desc 表名;
```

015.更新表

```
修改表名
alter table 表名 rename to 新的表名;

修改表的字符集
alter table 表名 character set 字符集名称;

添加一列
alter table 表名 add 列名 数据类型;

修改列名称类型
alter table 表名 change 列名 行列名 新数据类型;
alter table 表名 modify 列名 新数据类型;

删除列
alter table 表名 drop 列名;
```

016.删除表

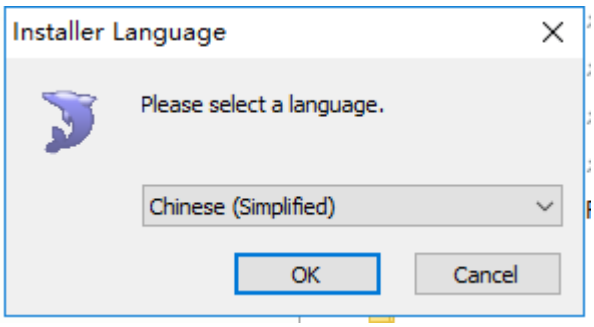
```
格式: drop table 表名;

删除学生表
drop table students;
```

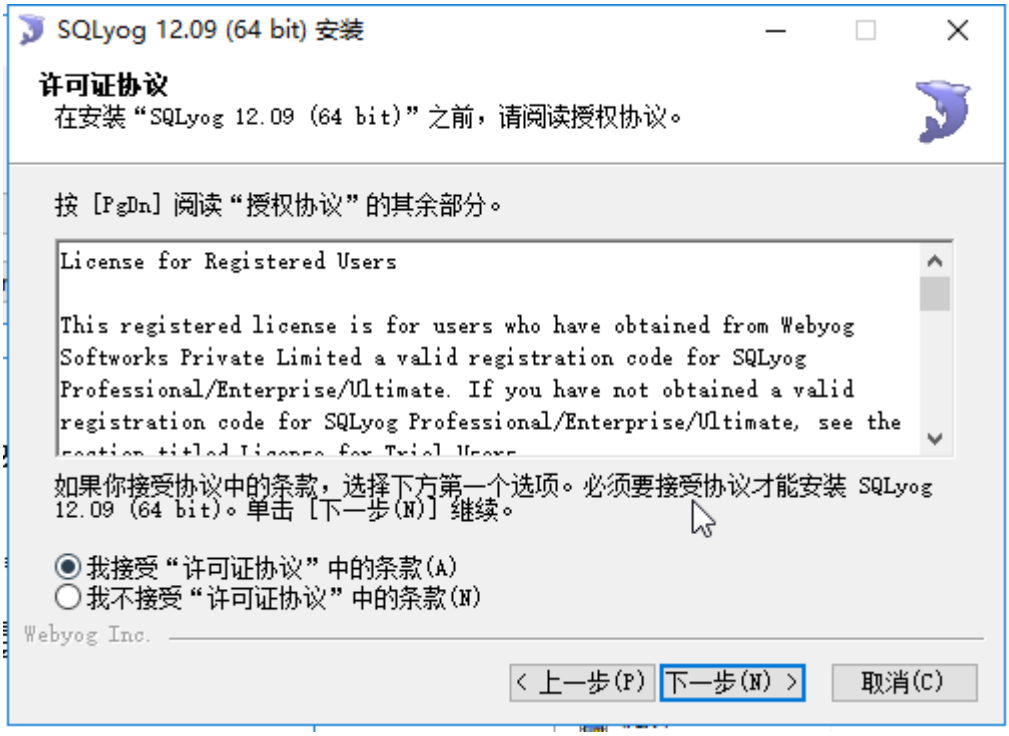
017.复制表

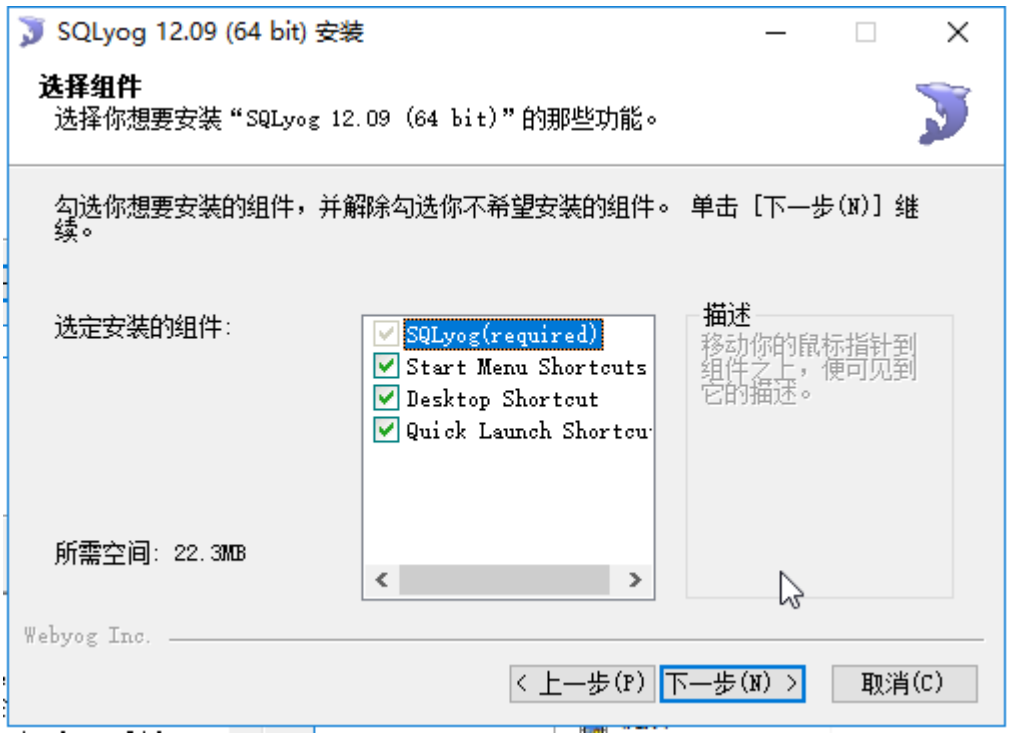
```
格式: create table 表名 like 被复制的表名;
```

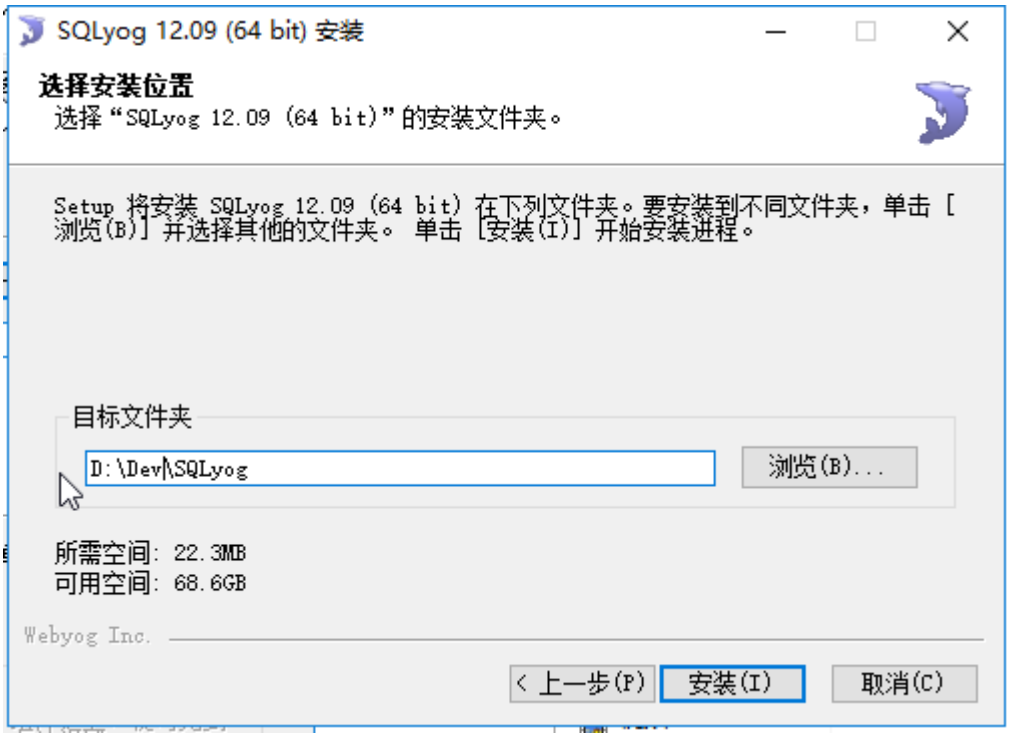
018.`SQLYog`的安装和使用

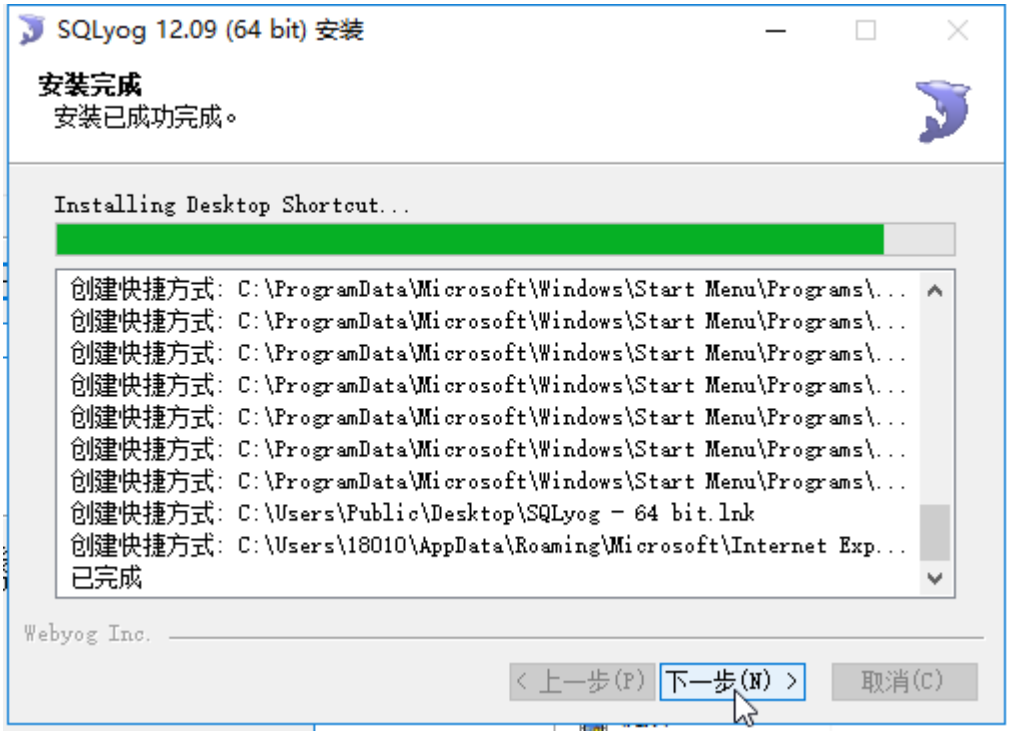

Installer Language
Please select a language.
Chinese (Simplified)
OK
Cancel


SQLyog 12.09 (64 bit) 安装
欢迎使用“SQLyog 12.09 (64 bit)”安装向导
这个向导将指引你完成“SQLyog 12.09 (64 bit)”的安装进程。
在开始安装之前，建议先关闭其他所有应用程序。这将允许“安装程序”更新指定的系统文件，而不需要重新启动你的计算机。
单击 [下一步(N)] 继续。
WORKS WITH MySQL
下一步(N) >
取消(C)

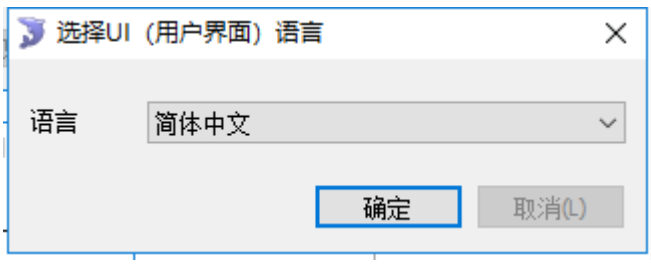

SQLyog 12.09 (64 bit) 安装
许可证协议
在安装“SQLyog 12.09 (64 bit)”之前，请阅读授权协议。
按 [PgDn] 阅读“授权协议”的其余部分。
License for Registered Users
This registered license is for users who have obtained from Webyog Softworks Private Limited a valid registration code for SQLyog Professional/Enterprise/Ultimate. If you have not obtained a valid registration code for SQLyog Professional/Enterprise/Ultimate, see the
如果你接受协议中的条款，选择下方第一个选项。必须要接受协议才能安装 SQLyog 12.09 (64 bit)。单击 [下一步(N)] 继续。
我接受“许可证协议”中的条款(A)
我不接受“许可证协议”中的条款(N)
Webyog Inc.
< 上一步(P)
下一步(N) >
取消(C)


SQLyog 12.09 (64 bit) 安装
选择组件
选择你想要安装“SQLyog 12.09 (64 bit)”的那些功能。
勾选你想要安装的组件，并解除勾选你不希望安装的组件。 单击 [下一步(N)] 继续。
选定安装的组件:
SQLyog(required)
Start Menu Shortcuts
Desktop Shortcut
Quick Launch Shortcu
描述
移动你的鼠标指针到组件之上，便可见到它的描述。
所需空间: 22.3MB
Webyog Inc.
< 上一步(P)
下一步(N) >
取消(C)

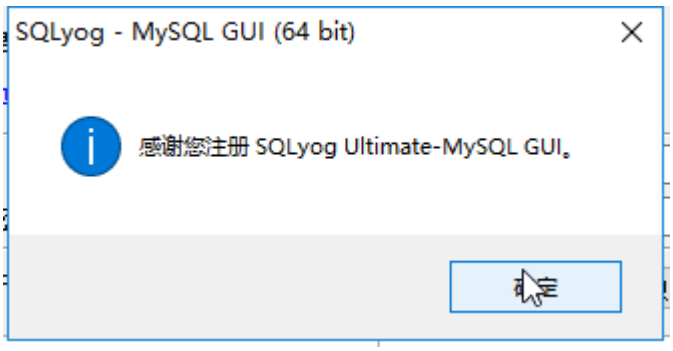

SQLyog 12.09 (64 bit) 安装
选择安装位置
选择“SQLyog 12.09 (64 bit)”的安装文件夹。
Setup 将安装 SQLyog 12.09 (64 bit) 在下列文件夹。要安装到不同文件夹，单击 [浏览(B)] 并选择其他的文件夹。 单击 [安装(I)] 开始安装进程。
目标文件夹
D:\Dev\SQLyog
浏览(B)...
所需空间: 22.3MB
可用空间: 68.6GB
Webyog Inc.
< 上一步(P)
安装(I)
取消(C)


SQLyog 12.09 (64 bit) 安装
安装完成
安装已成功完成。
Installing Desktop Shortcut...
创建快捷方式: C:\ProgramData\Microsoft\Windows\Start Menu\Programs\...
创建快捷方式: C:\ProgramData\Microsoft\Windows\Start Menu\Programs\...
创建快捷方式: C:\ProgramData\Microsoft\Windows\Start Menu\Programs\...
创建快捷方式: C:\ProgramData\Microsoft\Windows\Start Menu\Programs\...
创建快捷方式: C:\ProgramData\Microsoft\Windows\Start Menu\Programs\...
创建快捷方式: C:\ProgramData\Microsoft\Windows\Start Menu\Programs\...
创建快捷方式: C:\ProgramData\Microsoft\Windows\Start Menu\Programs\...
创建快捷方式: C:\Users\Public\Desktop\SQLyog - 64 bit.lnk
创建快捷方式: C:\Users\18010\AppData\Roaming\Microsoft\Internet Exp...
已完成
Webyog Inc.
< 上一步(P)
下一步(N) >
取消(C)

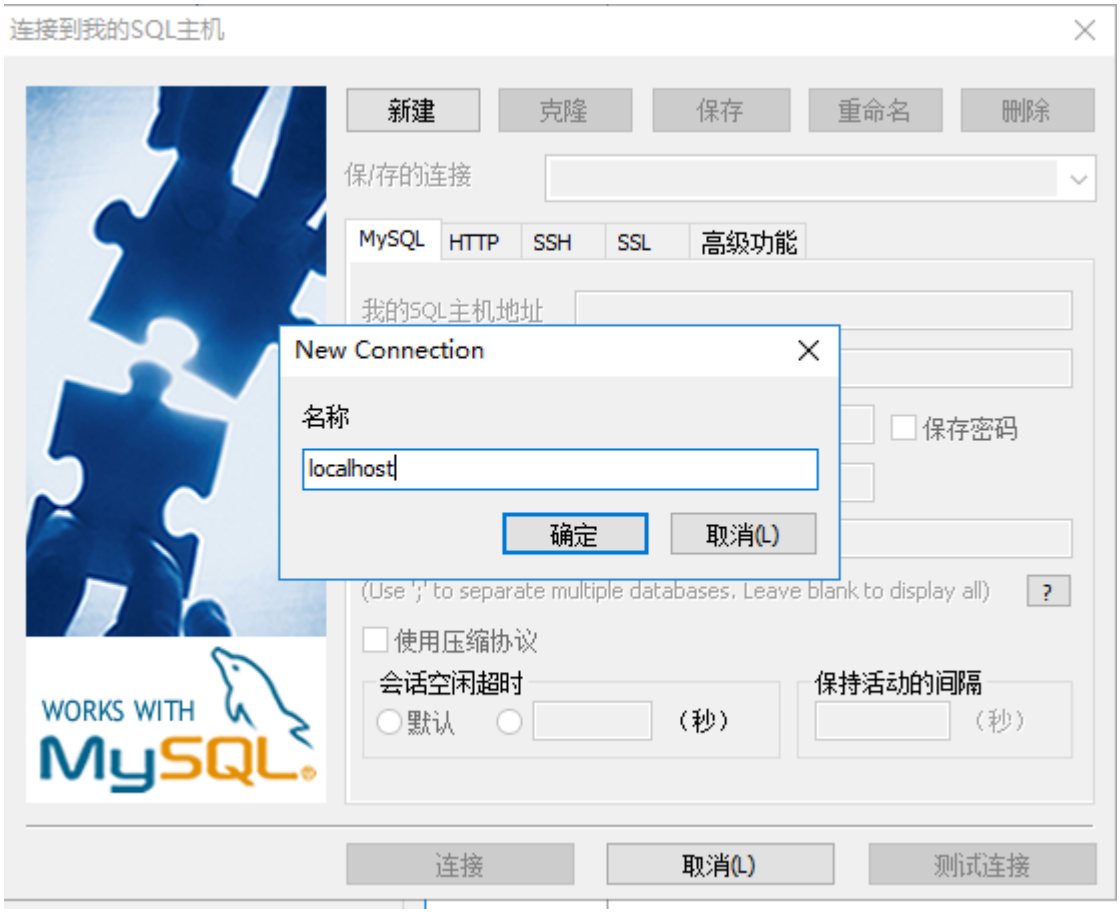

SQLyog 12.09 (64 bit) 安装
正在完成“SQLyog 12.09 (64 bit)”安装向导
“SQLyog 12.09 (64 bit)”已安装在你的系统。
单击 [完成(F)] 关闭此向导。
运行 SQLyog 12.09 (64 bit)(R)
WORKS WITH MySQL
< 上一步(P)
完成(F)
取消(C)


选择UI（用户界面）语言
语言
简体中文
确定
取消(L)


注册SQLyog
SQLyog - MySQL GUI v12.09 (64 bit)
要获得您的证书key，你需要购买SQLyog从：
http://www.webyog.com/shop
名称
cr173
证书密钥
8d8120df-a5c3-4989-8f47-5afc79c56e7c
（注：证书密钥区分大小写）
注册...
取消(L)

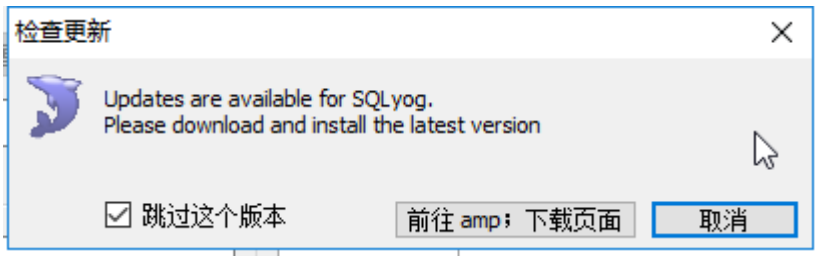

SQLyog - MySQL GUI (64 bit)
感谢您注册 SQLyog Ultimate-MySQL GUI。

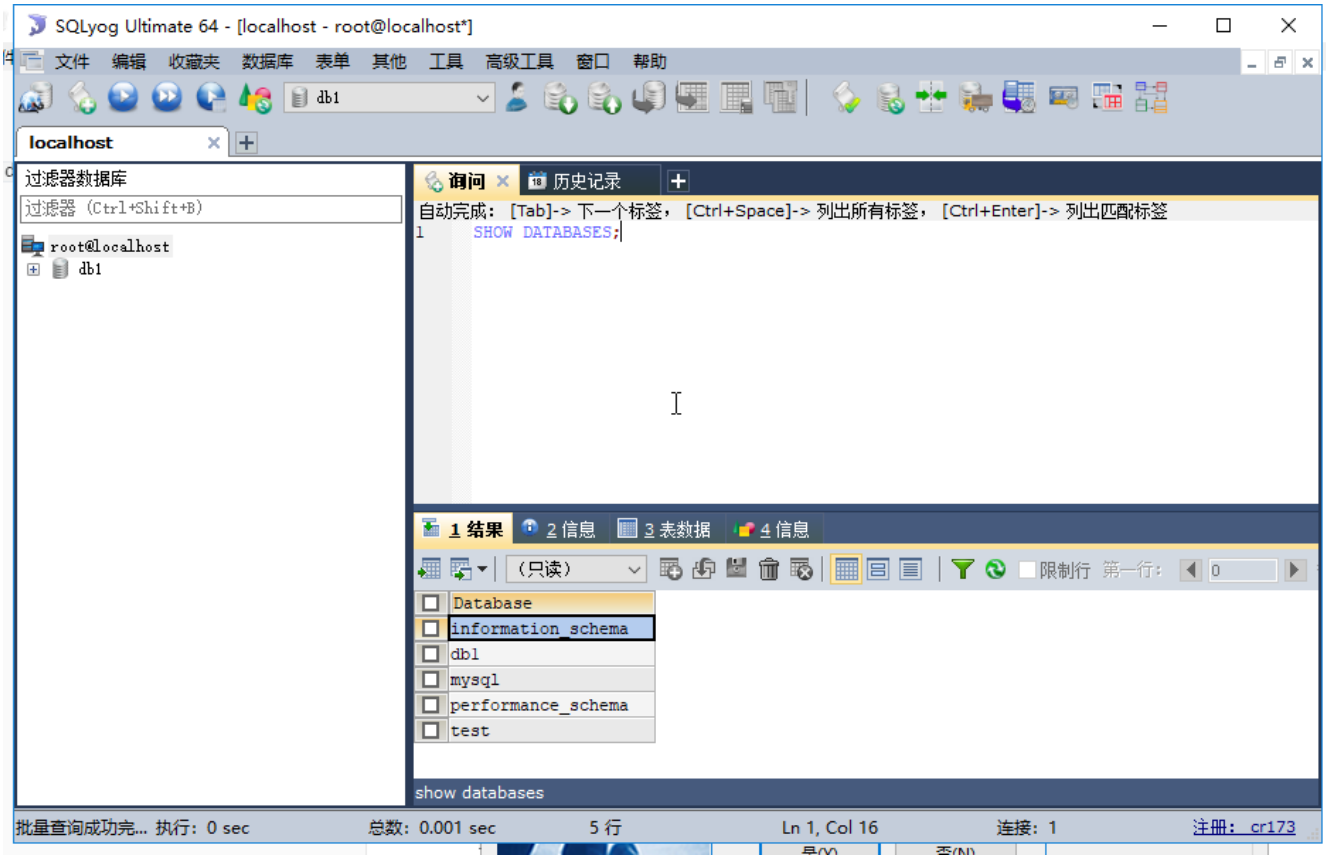

连接到我的SQL主机
新建
克隆
保存
重命名
删除
保存的连接
MySQL
HTTP
SSH
SSL
高级功能
我的SQL主机地址
用户名
密码
保存密码
端口
数据/库
(Use ';' to separate multiple databases. Leave blank to display all)
?
使用压缩协议
会话空闲超时
默认
（秒）
保持活动的间隔
（秒）
WORKS WITH MySQL
连接
取消(L)
测试连接


连接到我的SQL主机
新建
克隆
保存
重命名
删除
保/存的连接
MySQL
HTTP
SSH
SSL
高级功能
我的SQL主机地址
New Connection
名称
localhost
确定
取消(L)
保存密码
(Use ';' to separate multiple databases. Leave blank to display all)
?
使用压缩协议
会话空闲超时
默认
(秒)
保持活动的间隔
(秒)
WORKS WITH MySQL
连接
取消(L)
测试连接


连接到我的SQL主机
新建
克隆
保存
重命名
删除
保/存的连接
localhost
MySQL
HTTP
SSH
SSL
高级功能
我的SQL主机地址
localhost
用户名
root
密码
保存密码
端口
3306
数据/库
db1
(Use ';' to separate multiple databases. Leave blank to display all)
使用压缩协议
会话空闲超时
默认
28800
(秒)
保持活动的间隔
(秒)
WORKS WITH MySQL
连接
取消(L)
测试连接


连接到我的SQL主机
新建
克隆
保存
重命名
删除
保/存的连接
localhost
MySQL
HTTP
SSH
SSL
高级功能
我的SQL主机地址
localhost
保存密码
SQLyog Ultimate
您已变更连接细节。
您要储存变更吗?
是(Y)
否(N)
blank to display all)
WORKS WITH MySQL
会话空闲超时
默认
28800
(秒)
保持活动的间隔
(秒)
连接
取消(L)
测试连接


检查更新
Updates are available for SQLyog.
Please download and install the latest version
跳过这个版本
前往 amp; 下载页面
取消



019.DML之添加数据

格式:insert into 表名(字段) values(对应数据);

- 注意:
  - 1.列表和值要依次对应
  - 2.如果不给值,可以写`null`
  - 3.除了数字类型,其他类型都需用单引号或双引号引起来
- 同时向`students`表添加多条数据

```
-- 向学生表插入数据
use db1;
desc students;

-- 同时插入多条数据
insert into students (name ,age,math,english,chinese,birthday)
values
("张大鹏",22,99,33,88,"1993-8-29")
;

select *from students;


insert into students (name ,age,math,english,chinese,birthday)
```

```
values
("刘国兵",22,69,63,78,"1993-8-29"),
("刘国梁",21,79,73,78,"1993-8-29"),
("刘国栋",21,99,73,78,"1993-8-29");
```

020.DQL之查询所有记录

```
格式:select *from 表名;
```

021.DML之删除数据

```
格式:delete from 表名 条件;

格式2:truncate table 表名;
注意:truncate 会先删除表,再创建一张一模一样的表,推荐使用,效率更高

删除id为1的
delete from students where id=1;
```

- 注意:
  - 1.如果不给条件,会删除所有数据

022.DML之修改数据

```
格式: update 表名 set 列名=新值 条件;
多个数据可以用逗号隔开
```

- 注意:
  - 1.不加任何条件会修改所有数据
  - 2.修改多个数据可以用逗号隔开

023.基础查询

```
去重查询
select distinct 字段 from 表名 条件

计算
select name math,english,math+english from students;
注意,只要有null,计算结果都是null
解决方法:ifnull(可能为null的字段,默认值)
select name math,english,math+ifnull(english,0) from students;

多字段查询
select 字段名1,字段名2... from 表名;

起别名:as关键字,as也可以省略
```

- 查询所有学生的成绩

```
-- 查询所有学生的成绩
use db1;
show tables;
select *from students;
select name,math,english,chinese,math+english+chinese as 总分 from students;
```

024.条件查询

```
where子句后面跟条件

运算符
>  <  = ...
in (可能的条件列表)
between 小值 and 大值
and or not
is null
is not null
```

- 查询数学分数大于80分的学生

```
-- 查询数学分数大于80分的学生
select name,math from students where math>80;
```

025.模糊查询

```
like关键字
_ 表示任意单个字符
% 表示任意多个字符

查询姓马的
like "马%"

查询第二个字是化的
like "_化%"

查询姓名中包含马的人
lik "%马%"
```

- 查询姓刘的学生

```
-- 查询姓刘的学生
select *from students where name like "刘%";
```

- 查询姓名中有"兵"字的学生

```
-- 查询姓名中有兵字的学生
select *from students where name like "%兵%";
```